



Washington State
Department of Transportation
 Paula Hammond
 Secretary of Transportation

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March 25, 2009

Mr. Pat Chapman
 Washington State Department of Fish and Wildlife
 Habitat Program
 600 N. Capitol Way
 Olympia, WA 98501-1091

RE: SR 543 I-5 to International Boundary Widening and Border Crossing Improvement
 Mitigation Site
 WDFW HPA Permit **100464-1**

Dear Mr. Pat Chapman:

The Washington State Department of Transportation completed monitoring of the site on July 7, 2008 to determine survival of planted species for compliance with the above-listed HPA.

General Site Information	
WDFW HPA Permit Number	100464-1
Restoration Location	Intersection of Sweet Road and Stadsvold Road, near Sumas, Whatcom County
Construction Date	2005-2007
Monitoring Period	2007-2009
Year of Monitoring	2 of 3
Type of Restoration	Riparian Revegetation

Site development:

Permit Requirement	2008 Results	Management Activities
80% or greater survival of planted woody species along banks	99% survival overall	Continued weed control

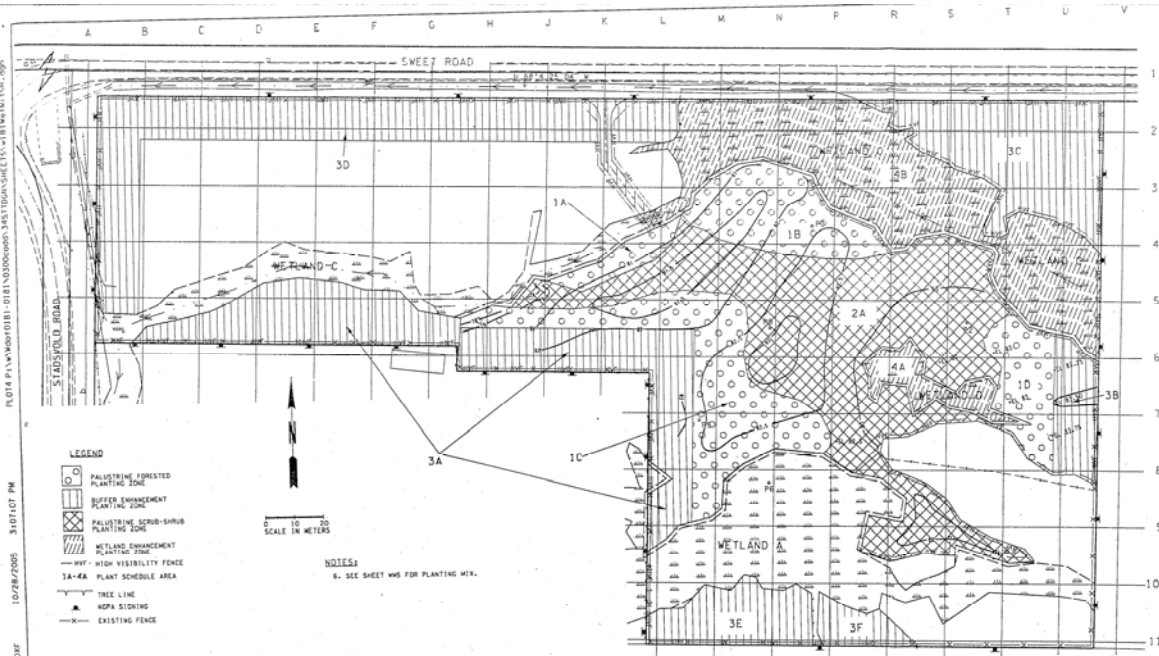
Planted woody species survival currently exceeds the permit requirement. *Salix* species (willows) along the stream banks appear healthy, providing shade for the stream, stabilization of the banks and habitat for wildlife. *Alnus rubra* (red alder) is beginning to colonize along the banks. An emergent plant community is beginning to develop in the western end of the riparian channel.

Aerial cover of invasive species was low in the riparian area. Some *Phalaris arundinacea* (reed canarygrass) and *Cirsium arvense* (Canada thistle) was observed in the stream channel and along the banks. Continued management of invasives is recommended, to prevent further establishment.

We welcome your questions or comments. Please contact me at 360/570-6640 or by e-mail at busht@wsdot.wa.gov for questions about these mitigation sites.

Sincerely,

Tony Bush
Wetland Assessment and Monitoring Program



NOTE: ALL DIMENSIONS SHOWN ARE IN METERS UNLESS OTHERWISE NOTED.

DESIGNED BY	G. KING	10/20	10 WASH
ENTERED BY	G. FRANKLIN	10/20	OSADIS
CHECKED BY	K. SHULTZ	10/20	OSADIS
PROJ. ENGR.	C. DANIELS	10/20	
REGIONAL ADM. L. ENG.		10/20	

SR 543
1-5 TO INTERNATIONAL BOUNDARY
WIDENING & BORDER X-ING IMPROVEMENTS
MITIGATION PLANTING PLAN

Wetland Mix 7	1.5m D.C.	24
Red Osier Dogwood **		2241
Pacific Ribesberry **		977
Black Twimberrry **		977
Sageberry **		975
Sliver Willow **		977
FINE COMPOST (m3)		547
BANK OR WOOD CHIP MULCH (m3)		515
BIFILTRATION SWALE SEED MIX (m3)		46
NEST BOX		0
LOG W/ ROOTWAD		3
BRUSH PILE		3
ROCKPILE W/ HABITAT LOG		3
SNAG		4

BANK OR WOOD CHIP MULCH (m3)	294	33	181	1.00	0.00	0.00	0.00
EROSION CONTROL SEED MIX (m3)	39	101	125	.36	1.00	0.00	0.00
BRUSH PILE	2	1					
LOG W/ ROOTWAD	0	1					
NEST BOX	0	1					
ROCK PILE W/ HABITAT LOG	0	1					
SNAG	0	1					
Wetland Mix 4	1.5m D.C.	41	48	42			
Pacific Willow Stakes		176	377	8			
Sliver Willow Stakes		119	971	8			
Pacific Ribesberry		124	971	0			
Red Osier Dogwood		124	177	0			
Quaking Aspen		0	588	0			
ADD VEGETATION LOG SITES							
FINE COMPOST (m3)		48	348	2			
3" BANK OR WOOD CHIP MULCH (m3)		48	348	-			
BIFILTRATION SWALE SEED MIX (m3)		46	46	-			

* PLANT TREES MINIMUM 3m APART
** PLANT SHRUBS IN CLUSTERS OF 3 OR 4 OF SAME SPECIES
BARE ROOT TREES

WETLAND MITIGATION TOTALS

ITEM	METRIC QUANTITY	UNIT
CLEARING AND CRUISING	2,225	m ²
WETLAND MITIGATION EXCAVATION INCL. HAZEL	3431	m ³
BARBED THREE WIRE FENCE	1196	m
SINGLE THREE WIRE GATE 1.2m WIDE	1	NO
HIGH VISIBILITY FENCE	1554	m
WATTLE	862	m
PVE, 0.61m SCHED 4 BRIN PIPE	8.0	m

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SR 543
1-5 TO INTERNATIONAL BOUNDARY
WIDENING & BORDER X-ING IMPROVEMENTS
WETLAND MITIGATION QUANTITIES